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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,099	12/02/2003	Badari Kakumani	50325-0839	4394
29989 7590 04/19/2007 HICKMAN PALERMO TRUONG & BECKER, LLP 2055 GATEWAY PLACE SUITE 550 SAN JOSE, CA 95110			EXAMINER NGUYEN, PHILLIP H	
			ART UNIT 2191	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/19/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/727,099	KAKUMANI ET AL.	
	Examiner	Art Unit	
	Phillip H. Nguyen	2191	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 2, 13 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, 14-23 and 25-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20070116</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the amendment filed on January 16, 2007.
2. Per Applicant's request, claims 1, 3, 12, 14, 23, 25-34, and 49-51 have been amended. Claims 2, 13, and 24 are cancelled. Claims 52-65 are newly added. Claims 1, 3-12, 14-23, and 25-64 are pending in the application.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-51 have been considered but are moot in view of the new ground(s) of rejection.

### ***Note***

4. Applicant appears to be attempting to invoke 35 U.S.C. 112 6<sup>th</sup> paragraph in claim 52 by using "means-plus-function" language. However, Examiner notes that the only means for performing simulating in the specification appears to be software. Since no other specific structural limitations are disclosed in the specification, this claim covers software means when considered below.

### ***Claim Rejections - 35 USC § 101***

5. The amendment filed on January 16, 2007 does not overcome the 35 USC § 101 rejection set forth to claims 23-33, 49-51. Therefore, Examiner is maintaining the rejection. Applicant is suggested to change "computer-readable storage medium" to "computer-readable storage device" to overcome the rejection.

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6. Regarding claims 23-33, 49-51, and 53 are directed to computer readable medium, which is disclosed as light wave, radio wave, and infrared data communication. The specification provides intrinsic evidence the computer readable medium is intended to cover light wave, radio wave, and infrared data communication (in paragraph 210). Such are currently not believed to enable the computer readable medium to act as a computer hardware component and realize its functionally absent being claimed in combination with the necessary hardware to receive and convert the light wave, radio wave, and infrared data communication to computer useable code.

7. Regarding claims 1, 12, 23, and 54, the language of these claims raises a question as to whether the claims are directed to an abstract idea that is not tied to a technological art, environment or machine which would accomplished a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For example, claim 1 recites "wherein said node determines, using the software dependency information, running processes on said node that will be affected by the software update" does not produce any useful, concrete, and tangible result because the outcome is not realized as updating software, monitoring, controlling, or any other tangible output that would provide an utility. Therefore, the claims are non-statutory.

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***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 6, 8-11, 12, 17, 19-22, 23, 28, 30-33, and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Donohue (United States Patent No.: US 6,202,207 B1).

As per claims 1, 12, 23, and 54:

Donohue discloses:

- providing a master node (see at least col. 9, line 47 "**a number of remote server systems (50, 50')**");
- receiving a software update for a node on said master node (see at least col. 9, line 47-51 "**...from which software resources are available for applying updates to programs installed on the local system 10...Each server system includes within storage a list 60 of the latest versions of, and patches for, software products which are available from that server**");
- wherein the software update contains a software package or a set of software packages (see at least col. 9, line 37 "**software products**");

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- wherein a software package contains at least one software module with corresponding software dependency information (**It is inherent. In software, a module is a part of a program. Programs are composed of one or more independently developed modules that are not combined until the program is linked**);
- wherein said master node notifies said node that a software update is being requested (see at least col. 10, line 31-33 **"A URL identifying the relevant Web site 140 for update information is returned 210 to the updater component as a result of the search", providing a URL to updater component is considered as notifying the system 10 that software update is being requested**);
- wherein said master node passes said node identities of software package(s) to be updated and software dependency information (see at least col. 10, line 39-42 **"the updater component uses the URL to access 220 the list 60 and downloads 230 a file 160 comprising the portion of the list 60 of available updates which relates to the particular product"**); and
- wherein said node determines, using the software dependency information, running processes on said node that will be affected by the software update (see at least col. 10, line 59-62 **"the updater component then performs on the local computer system a comparison 250 between the current installed software product's identifier and**

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**release number and the listed available updates in the retrieved file 160").**

As per claims 6, 17, and 28:

Donohue discloses:

- wherein a user initiates a software update by installing an image containing the software update onto said master node (see at least col. 9, line 49-53 "**Each server system includes within storage a list 60 of the latest version** of , and patches for, software products...a list 60 of software updates...").

As per claims 8, 19, and 30:

Donohue discloses:

- wherein a software package indicates the type of node to which it applies (see at least col. 9, line 60-63 "**software updates list 60 includes for each software product version 110, and identification 120 of the software resources required for applying the update and an identification 130 of its prerequisite software products and their version numbers**").

As per claims 9, 20, and 31:

Donohue discloses:

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- wherein the software update contains a list of software packages destined for each node (see at least col. 9, line 60-63 "**software updates list 60 includes for each software product version 110, and identification 120 of the software resources required for applying the update and an identification 130 of its prerequisite software products and their version numbers**").

As per claims 10, 21, and 32:

Donohue discloses:

- wherein a software package contains version information, dependency information, and other metadata information pertaining to software in the package (see at least col. 9, line 60-63 "**software updates list 60 includes for each software product version 110, and identification 120 of the software resources required for applying the update and an identification 130 of its prerequisite software products and their version numbers**").

As per claims 11, 22, and 33:

Donohue discloses:

- wherein the metadata includes a list of application program interface (API) providers and consumers (see at least col. 13, line 18-22 "**...application programming interface (API) which allows other updater components to contact and communicate with it.**"; col. 15, line 29-67 "**...includes**



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**public API. These functions would be callable using existing network...").**

10. Claims 34, 35, 39-41, 43-53, 58, 59, 63, and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Kenner et al. (US 6,314,565 B1).

As per claims 34, 52, 53, and 58:

Kenner discloses:

- providing a software update simulator on said computer system (see at least col. 4, line 31 **"software updating tool"**);
- simulating processes from at least one node on said computer system (see at least col. 5, line 2-3 **"simulate manual transactions between the user terminal and the servers where the desired upgrades are stored"**);
- wherein each functional process that is simulated is a minimal version of a functional process that runs on said node (see at least col. 5, line 3 **"upgrades"**);
- receiving a software update for said node by said software update simulator (see at least col. 5, line 5-7 **"...Once the user terminal receives the data, the updating tool initiates installation of the software or software updates on the user terminal"**);
- wherein the software update contains a software package or a set of software packages (see at least col. 4, line 31 **"multimedia software"**);

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- wherein a software package contains at least one software module with corresponding software dependency information (**It is inherent. In software, a module is a part of a program. Programs are composed of one or more independently developed modules that are not combined until the program is linked**);
- wherein said software update simulator notifies a control process for said node that a software update is being requested (see at least col. 5, line 5-7 **"...Once the user terminal receives the data, the updating tool initiates installation of the software or software updates on the user terminal"**); and
- wherein said software update simulator passes said control process identities of software package(s) to be updated and software dependency information (see at least col. 5, **"...installation of the software or software updates on the user terminal"**).

As per claims 35, 59:

Kenner discloses:

- wherein said control process determines running functional node processes that will be affected by the software update using the software dependency information (see at least col. 4, line 54-56 **"the software updating tool then analyzing configuration information from the user terminal to determine what multimedia software is stored by the**

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**system**", the updating tool is also acting as control process at the user terminal).

As per claim 39:

Kenner discloses:

- wherein a user initiates a software update by loading an image containing the software update into said software update simulator (see at least col. 4, line 44-45 "**The multimedia software updating tool downloads a script file from an update service provider...contains a list of multimedia software and upgrades located at various sites on the Internet...**").

As per claim 40:

Kenner discloses:

- wherein the user indicates what nodes and which software package(s) are to be updated (see at least col. 4, line 29-30 "**a user desires to update the configuration of a user terminal with the latest multimedia software...**").

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As per claim 41:

Kenner discloses:

- wherein a software package contains version information, dependency information, and other metadata information pertaining to software in the package (see at least col. 4, line 55 "...**configuration information**...").

As per claims 43, 46, 49, and 63:

Kenner discloses:

- providing a software update simulator on said computer system (see at least col. 4, line 31 "**software updating tool**");
- wherein said software simulator runs software components normally run on a master node in the network of nodes (see at least col. 5, line 2-3 "**simulate manual transactions between the user terminal and the servers where the desired upgrades are stored**");
- wherein a user loads a node's current software configuration into said software simulator by loading current software modules installed on a node (see at least col. 4, line 54-56 "**The software updating tool the analyzes configuration information from the user terminal to determine what multimedia software is stored by the system.**" – The software configuration must be loaded into the updating tool in order to perform the analysis);
- wherein the user requests a simulation of a software update by loading an updated software image into said simulator (see at least col. 4, line 44-45

**“The multimedia software updating tool downloads a script file from an update service provider...contains a list of multimedia software and upgrades located at various sites on the Internet...”);**

- wherein the software image contains a software package or a set of software packages (see at least col. 4, line 31 **“multimedia software”**);
- wherein a software package contains at least one software module with corresponding software dependency information **(It is inherent. In software, a module is a part of a program. Programs are composed of one or more independently developed modules that are not combined until the program is linked)**;
- wherein said software simulator calculates the software update's impact on said node using the current software configuration of said node (see at least col. 4, line 54-62 **“The software updating tool then analyzes configuration information from the user terminal to determine what multimedia software is stored by the system...based on this comparison, the updating tool is able to advise the user as to the availability of upgrades which can be used to enhance the multimedia software ...”**); and
- displaying the calculation's results to the user **(It is inherent in order for the user to see the advise from updating tool)**.

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As per claims 44, 47, and 50:

Kenner discloses:

- wherein the user also indicates to said software simulator the type of node being analyzed (see at least col. 4, line 29-30 "**a user desires to update the configuration of a user terminal with the latest multimedia software...**").

As per claims 45, 48, 51, and 64:

Kenner discloses:

- wherein said software update is a software downgrade where modules are being removed (**It is inherent. In order to update to a newer version, the old version must be removed or overwrite**).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3-5, 14-16, 25-27, and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue (United States Patent No.: US 6,202,207 B1), in view of Ferguson et al. (United States Patent Application Publication No.: US 2003/0110482 A1).

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As per claims 3, 14, 25, and 55:

Donohue discloses:

- wherein said node notifies processes that have indicated interest in software updates that the software update is being requested (see at least col. 10, line 59-62 **"the updater component then performs on the local computer system a comparison 250 between the current installed software product's identifier and release number and the listed available updates in the retrieved file 160", notifies current installed software product by comparing the current installed software product's identifier and release number and the listed available updates)**);
- wherein each notified process evaluates the effect that the software update will have on its operation (see at least col. 12, line 9-12 **"it is desirable for users to be able to determine the effects of updates and so the software resources for the update include a description of these effects which a user or administrator can read"**); and
- wherein if a process finds that the software update will have no negative effects, the process returns an acceptance of the software update to said node (see at least claim 1 **"...if the determination is positive, the updater component initiating an update of said pre-requisite computer program"**; see also at least col. 11, line 56-63 **"If all required resources are available locally (or on another machine in the case of software relying on some prerequisite software operating on a**

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**remote machine), and have been verified, then the updater component progresses to the step 310 of building the updated software version.”).**

Donohue does not explicitly disclose:

- wherein if any of the processes determine that the software update will degrade or have a negative impact on said node's normal operation, the process returns a veto to said node along with reasons why.

However, Ferguson discloses (see at least paragraph 0035 **“if the update is not accepted or delayed by the owner, the available update is assumed to be declined or refused. For the owner to decline the notification... may send a return notice declining the update...”**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Donohue's approach to allow user to veto the update by sending a return notice declining the update. One of ordinary skill in the art would have been motivated to modify because information relating to the fact that the offer of an update was communicated to the owner of the machine can be stored so that such an offer will normally not be sent a second time (see at least paragraph 0035).

As per claims 4, 15, 26, and 56:

Donohue discloses:

- wherein said node waits for all of the notified processes to return the results of their evaluations (see at least col. 12, line 9-12 **“...determine**



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**the effects of updates and soothe software resources for the update include description of these effects which a user or administrator can be read”).**

Donohue does not explicitly disclose:

- and once all of the processes have reported to said node, said node notifies said master node if any of the processes have vetoed the software update along with their reasons.

However, Ferguson discloses (see at least paragraph 0035 **“if the update is not accepted or delayed by the owner, the available update is assumed to be declined or refused. For the owner to decline the notification... may send a return notice declining the update...”**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Donohue's approach to allow user to veto the update by sending a return notice declining the update. One of ordinary skill in the art would have been motivated to modify because information relating to the fact that the offer of an update was communicated to the owner of the machine can be stored so that such an offer will normally not be sent a second time (see at least paragraph 0035).

As per claims 5, 16, 27, and 57:

Donohue and Ferguson do not explicitly disclose:

- wherein said master node displays node identifiers and the processes that have vetoed the software update along with their reasons to a user.

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However, it would have obvious to one having an ordinary skill in the art at the time the invention was made to modify Donohue and Ferguson's approaches to allow the server to display to the user veto information for confirming the veto of software update. One of ordinary skill in the art would have been motivated to display the reject information to user to confirm the rejection before remove the update.

13. Claims 7, 18, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donohue (United States Patent No.: US 6,202,207 B1), in view of Halpern et al. (United States Patent No.: US 6,282,711 B1).

As per claims 7, 18, and 29:

Donohue does not explicitly disclose:

- wherein the user indicates what nodes and which software package(s) are to be updated.

However, Halpern discloses:

- wherein the user indicates what nodes and which software package(s) are to be updated (see at least col. 3, line 8-10 "**the user initiates the installation process by connecting to the remote server system...**").

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Donohue's approach to allow user to control the software update process. One of ordinary skill in the art would have been motivated to allow user to control the software updating processing

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because user can choose the software components and options that he desires his software package to have (see at least col. 3, line 37-42).

14. Claims 36-38, 42, and 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (United States Patent No.: US 6,314,565 B1), in view of Ferguson et al. (United States Patent Application Publication No.: US 2003/0110482 A1).

A per claims 36 and 60:

Kenner does not explicitly disclose:

- wherein said control process notifies processes that have indicated interest in software updates that the software update is being requested (see at least col. 4, line 54-65 **“software updating tool then analyzes configuration information from the user terminal...compares a list of the user’s multimedia software with the list of software upgrades contained in the script file...”** - notifies by comparing the configuration information and indicates to user);
- wherein each notified process evaluates the effect that the software update will have on its operation (see at least col. 4, line 54-65 **“software updating tool then analyzes configuration information from the user terminal...compares a list of the user’s multimedia software with the list of software upgrades contained in the script file...”** – analyzing the configuration to find out the effect if upgrade the software); and

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- wherein if a process finds that the software update will have no negative effects, the process returns an acceptance of the software update to said control process (see at least col. 4, line 6-7 "**installation of the software or software upgrades on the user terminal**").

Kenner does not explicitly disclose:

- wherein if any of the processes determine that the software update will degrade or have a negative impact on said node's normal operation, the process returns a veto to said control process along with reasons why.

However, Ferguson discloses (see at least paragraph 0035 "**if the update is not accepted or delayed by the owner, the available update is assumed to be declined or refused. For the owner to decline the notification... may send a return notice declining the update...**").

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Donohue's approach to allow user to veto the update by sending a return notice declining the update. One of ordinary skill in the art would have been motivated to modify because information relating to the fact that the offer of an update was communicated to the owner of the machine can be stored so that such an offer will normally not be sent a second time (see at least paragraph 0035).

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As per claims 37 and 61:

Ferguson discloses:

- wherein said control process waits for all of the notified processes to return the results of their evaluations and once all of the processes have reported to said control process, said control process notifies said software update simulator if any of the processes have vetoed the software update along with their reasons (see at least paragraph 0035 **"if the update is not accepted or delayed by the owner, the available update is assumed to be declined or refused. For the owner to decline the notification... may send a return notice declining the update..."**).

As per claims 38 and 62:

Kenner and Ferguson do not explicitly disclose:

- wherein said master node displays node identifiers and the processes that have vetoed the software update along with their reasons to a user.

However, it would have obvious to one having an ordinary skill in the art at the time the invention was made to modify Donohue and Ferguson's approaches to allow the server to display to the user veto information for confirming the veto of software update. One of ordinary skill in the art would have been motivated to display the reject information to user to confirm the rejection before remove the update.

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As per claim 42:

Kenner and Ferguson does not explicitly disclose:

- wherein the metadata includes a list of application program interface (API) providers and consumers.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that any combination of software program, there are either APIs providers or APIs consumers in order to communicate with the operating systems. One would have been motivated to include API in the software updates to allow the software program communicating with the operating system and it's easier for the user to learn new software program.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PN  
03/05/2007



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SUPERVISORY PATENT